



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,430	01/15/2004	Tomoko Sugito	2038-322	3355

7590 11/12/2004

LOWE HAUPTMAN GILMAN  
& BERNER, LLP  
Suite 310  
1700 Diagonal Road  
Alexandria, VA 22314

EXAMINER

HILL, LAURA C

ART UNIT PAPER NUMBER

3761

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



**UNITED STATES DEPARTMENT OF COMMERCE**

**U.S. Patent and Trademark Office**

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

CS

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

EXAMINER
----------

ART UNIT	PAPER
----------	-------

20041105

DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

## Office Action Summary

Application No.

10/757,430

Applicant(s)

SUGITO ET AL.

Examiner

Laura Hill

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20041105.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Specifically, there was no English translation of the abstract of JP 9-51913 included. Therefore, unless the examiner on form PTO-892 has cited the reference, it has not been considered.

### ***Specification***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

A misspelling is noted on page 2, line 6 which states, "These splits are arranged..." It is suggested to the applicant that this statement read "These slits are arranged..." A misspelling is also noted on page 29, line 5 which states "to or more layers". It is suggested to the applicant that this statement read "two or more layers"

Unclear language is noted on page 2, lines 19-20, which should read "...immediately after--it--has been discharged...".

Appropriate correction is requested.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1,3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coles et al. (US 5,762,642). With regard to Claim 1 the Coles et al. reference discloses an absorbent article with front, rear and crotch regions but does not specifically disclose waist regions since the preferred embodiment is a sanitary napkin rather than a diaper as claimed (see Figure 3).

The Coles et al. reference discloses a body-contacting and garment surface (column 4, lines 17-18) with multiple-layered absorbent core 16,18 interposed between topsheet 12 and backsheet 14 (column 7, lines 59-61). The core is formed by laminate fold tissue with main portion 20 that is analogous to upper surface in core and two

Art Unit: 3761

lateral flaps 22,24 analogous to lower surface 12 of core claimed folded onto main portion 20 (column 8, lines 11-14).

The Coles et al. reference does not disclose upper and lower sections of the first and second sheets covering specific regions of the absorbent core, but it would be obvious to one skilled in the art to have upper and lower sections covering the core in various regions since the entire first sheet disclosed covers the core.

The Coles et al. reference discloses barrier structures that may be applied to liquid impervious topsheet 12 and a core that has longitudinal centerline 28 that bisects transverse direction 2 and contains barrier lines, which extend through the entire region of sanitary napkin (column 12, line 60 and column 8, lines 32-36). The barrier structure reduces and can prevent lateral migration of liquid in center, improves longitudinal migration and therefore is analogous to the tubular liquid passage on the first sheet claimed (column 2, lines 1-4).

The Coles et al. reference further discloses that the barrier structure discussed above which extends from topsheet side to backsheet and extends from waist to crotch regions as claimed (column 2, lines 15-16).

With regard to Claims 3 and 4, the Coles et al. reference discloses a liquid-pervious topsheet 2 that can be manufactured from woven and nonwoven materials and core with lower density zones as applied to Claim 1 (column 5, lines 46-48 and column 4, lines 33-38). Although the Coles et al. reference does not disclose an upper section with varying fiber densities in subsections, it is well known to those skilled in the art that body fluids generally tend to spread from regions in which fiber density is relatively high

Art Unit: 3761

toward the regions in which fiber density is relatively low and tend to spread more rapidly in the regions in which the density is relatively high than in the regions in which the density is relatively low. Therefore, it would be obvious to alter the fiber densities of the upper section of the first sheet as claimed to better improve the absorbent characteristics and maximize core area.

2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coles et al. as applied to Claim 1 in view of Sroda et al. (US 2004/0087924). The Coles et al. reference discloses an absorbent article with barrier structures that reduce lateral migration and improve longitudinal migration of liquid in the absorbent core as discussed above. The Sroda et al. reference discloses slits that reside on or are adjacent to a principal longitudinal axis L and act as fluid intake enhancement structures, thereby increasing the surface area of the pliable component 66 to allow body fluids to be more rapidly absorbed into core (paragraph 0117, lines 3-7 and 16-18). The Sroda et al. reference further teaches that placing a more hydrophilic layer portion of the topsheet 62 towards the absorbent member 66 helps direct liquid into the absorbent member 66 (paragraph 0069, lines 1-4). It would therefore be obvious to one skilled in the art to combine the liquid direction-controlling elements of Coles et al. with the slit teachings of Sroda et al. to form a loop which promotes absorbent core utilization since both achieve the same function of directing fluids longitudinally as claimed.

### ***Conclusion***

The prior art made of record and not relied upon is not considered pertinent to the applicant's disclosure. The Mishima et al. reference, U.S. patent no. 6,436,083 is cited for showing a diaper with waist regions, a liquid-pervious first sheet divided into topsheet sections for the front and rear waist regions, a topsheet section for the crotch region analogous to lower section of first sheet claimed and a backsheet divided into sections for the crotch region. The reference, Nakahata et al. U.S. patent no. 6,262,331 is cited for showing a diaper with waist regions, a core with wearer and garment-facing surfaces, a topsheet positioned adjacent the body-facing surface and a backsheet positioned adjacent the garment-facing surface of the core. The Mishima et al. reference, U.S. patent no. 6,383,170 is cited for showing a backsheet which extends transversely outward beyond the outer side edges of the nonwoven topsheet and barrier flaps joined to the topsheet along zones extending inside the longitudinally opposite ends of the core so that the ends can reliably absorb an amount of discharged urine possibly flowing into these spaces. The Gryskiewicz, U.S. patent no. 5,913,851 is cited for showing an undergarment with waist regions, a liquid absorbent core with containment beams that are transversely spaced from longitudinal line of garment shell. The Hammons et al. reference, U.S. patent no. 6,316,688 is cited for showing a sanitary napkin with leakage barriers bonded to top surface of outer containment beams to inhibit lateral migration of liquids, end seals which provide barriers to longitudinal movement of liquid, and a central lobe symmetrically disposed about the principal longitudinal centerline L of the sanitary napkin.




Art Unit: 3761

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Hill whose telephone number is 571-272-7137. The examiner can normally be reached on 8:00 AM-5:30 PM (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on 571-272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura Hill  
Examiner  
Art Unit 3761

A handwritten signature in black ink, appearing to read "Larry I. Schwartz", with a large, stylized loop at the end.

Larry I. Schwartz  
Supervisory Patent Examiner  
Group 3700